

Abstract

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Efficient public transit service attracts urban citizens to use, which helps in reducing the traffic congestion on the road. For the public transit services to work effectively, the transit agencies must evaluate their performance. By doing this, the agency would be able to determine the strong and the weak routes in the network. Reallocation of the resources can be done accordingly to improve the efficiency of the network. Typically, in the literature, the urban transit network of a city is compared to other similar networks for different cities. From the comparison, the performance of a network as a whole is evaluated. This technique does not give insights into the strong points and the weak points within a particular transit network.

In this study, an attempt is made to develop a procedure to evaluate every route in the network. While developing this procedure, data-starved conditions that are normally observed in developing economies have been considered. Developed procedure is then applied to a real-world transit network to check how easily can it be applied and whether it is performing in ways expected.